

REMARKS

The amendments set out above and the following remarks are believed responsive to the points raised by the Office Action dated January 16, 2004. In view of the amendments set out above and the following remarks, reconsideration is respectfully requested.

The Pending Claims

Claims 1-13, 15-22, and 31-34 remain pending.

Claims 1-4 and 32-34 have been amended to describe the invention more clearly. No new matter has been added, the basis for the amended claim language may be found within the original specification, claims and drawings.

Claims 1-4 and 32-34 are supported at, for example, page 11, lines 8-10. Entry of the above is respectfully requested.

The Office Action

Claims 1-13, 15-22, and 31-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over European Patent Application Publication No. 0,630,675 A1 (hereinafter referred to as "EP '675") in view of U.S. Patent No. 5,547,576 to Onishi et al. (hereinafter referred to as "Onishi et al."). This rejection is respectfully traversed.

As an initial point, the statement in the Office Action "[r]e the ratio of N/O, Onishi teaches equivalents of amino groups" is simply not understood. Moreover, it is noted the Office Action indicates EP '675 teaches an "N/O ratio," and "excess surface N/O." These terms are not taught in EP '675. EP '675 refers to a variety of treatments, and there is no teaching in EP '675 that an element should have both nitrogen and oxygen. Thus, while the Office Action indicates "the N/O ratio can be optimized" and the Office Action refers to a "result effective variable" (citing, for example, *In re Antonie*, 195 USPQ 6 (CCPA, 1977)), there is no suggestion in EP '675 that an N/O ratio is a "result effective variable" and there is nothing in EP '675 leading one to optimize an N/O ratio.

The fact that Onishi et al. may use polyethyleneimine (mw=300: Table I, example 6) is of no import. Onishi et al. simply does not cure the deficiencies of EP '675, and therefore, the combination also fails to render the present invention obvious.

Additionally, since EP '675 teaches treating three-dimensionally reticular porous members, and Onishi et al. emphasizes treating membranes, one would not be led to a filter according to the present invention, i.e., comprising at least two fibrous elements, each having the specified surface characteristics. Furthermore, while the Office Action refers to Onishi et al. Table 1, example 6, this example illustrates platelet removal below that of EP '675, reinforcing

that one of ordinary skill in the art would not be led to combine the teachings of EP '675 with Onishi et al.

With respect to claim 5, there is no suggestion in EP '675 and/or Onishi et al. of the claimed alternating arrangement of elements. While the Office Action has cited *In re Japikse*, 86 USPQ 70 (CCPA, 1950) and *In re Kuhle*, 188 USPQ 7 (CCPA, 1975) and referred to a "rearrangement of parts," those cases merely stand for the unremarkable proposition that the movement of a starting switch to a different position, and the particular placement of a electrical contact, are modifications known in a known process. For the reasons set forth above, the claimed invention is novel and non-obvious, and furthermore, interposing a fibrous filter element having a hydroxylated surface between two fibrous filter elements having surfaces including the nitrogen-to-oxygen ratio in the range of from at least 0.01 to less than about 1.00 is not a modification known in the art.

The dependent claims are also allowable, as they depend from the novel and non-obvious independent claims. Additionally, while the Official Action states the zeta potential and CWST would be similar for similar materials, the Official Action does not explain why this is so, and, even if the Official Action explained what "similar" materials are, for the reasons set forth above, the Office Action has not shown the cited art discloses "similar materials." Illustratively, EP '675 does not provide sufficient information to determine a N/O ratio, and it teaches a "cationic treatment" and refers to "maintaining a positive charge of the filter for a long period of time" (page 5, lines 9-18), which would appear to provide a positive zeta potential at physiological pH.

For the reasons set forth above, reconsideration of the rejection is respectfully requested.

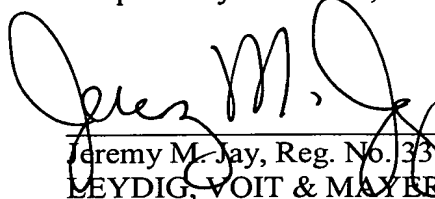
Conclusion

In view of the amendment and remarks recited herein, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue.

In re Appln. of BORMANN et al.
Application No. 09/936,732

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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